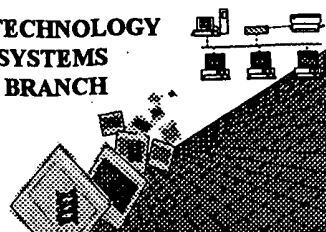


BIOTECHNOLOGY
SYSTEMS
BRANCH



SK

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/088,639
Source: Per 110
Date Processed by STIC: 8/6/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



PCT10

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/088,639

DATE: 08/06/2002
TIME: 14:10:46

Input Set : A:\003300-920.ST25.txt
Output Set: N:\CRF3\08062002\J088639.raw

4 <110> APPLICANT: Brodin, Thomas
5 Karlstrom, Pia J.
6 Ohlsson, Lennart G.
7 Tordsson, Jesper M.
8 Kearney, Philip P.
9 Nilson, Bo H.K.
11 <120> TITLE OF INVENTION: Novel Compounds
13 <130> FILE REFERENCE: 003300-920
15 <140> CURRENT APPLICATION NUMBER: US 10/088,639
16 <141> CURRENT FILING DATE: 2002-03-20
18 <150> PRIOR APPLICATION NUMBER: SE 9903895-2
19 <151> PRIOR FILING DATE: 1999-10-28
21 <160> NUMBER OF SEQ ID NOS: 51
23 <170> SOFTWARE: PatentIn Ver. 2.1

Does Not Comply
Corrected Diskette Needed

pp1-3,6,11-14

ERRORED SEQUENCES

25 <210> SEQ ID NO: 1
26 <211> LENGTH: 747
27 <212> TYPE: DNA
28 <213> ORGANISM: Macaca fascicularis → <220> insert this mandatory
30 <221> NAME/KEY: CDS
31 <222> LOCATION: (1)..(747)
33 <223> OTHER INFORMATION: Coding sequence VL (1-109) - modified Huston
34 linker (110-127) - VH (128-249)
36 <400> SEQUENCE: 1
37 tct tct gag ctg act cag ggc cct gca ttg tct gtg gcc ttg gga cat 48
38 Ser Ser Glu Leu Thr Gln Gly Pro Ala Leu Ser Val Ala Leu Gly His
39 1 5 10 15
41 aca gtc agg atg acc tgc caa gga gac agc ctc aaa acc tat tat gca 96
42 Thr Val Arg Met Thr Cys Gln Gly Asp Ser Leu Lys Thr Tyr Tyr Ala
43 20 25 30
45 agc tgg tac cag cag aag cca ggc cag gtc cct gtg ctg gtc atc tat 144
46 Ser Trp Tyr Gln Gln Lys Pro Gly Gln Val Pro Val Leu Val Ile Tyr
47 35 40 45
49 ggt aac aac tac cgg ccc tca ggg atc cca ggc cga ttc tct ggc tcc 192
50 Gly Asn Asn Tyr Arg Pro Ser Gly Ile Pro Gly Arg Phe Ser Gly Ser
51 50 55 60
53 tgg tca gga aac aca gct tcc ttg acc atc act gcg gct cag gtg gaa 240
54 Trp Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Ala Ala Gln Val Glu
55 65 70 75 80
57 gat gag gct gac tat tac tgt aac tcc tgg gac agc agc ggt acc cat 288

(GLOBAL error)

<220> insert this mandatory

*numeric
identifier
wherever*

*<221>, <222>,
or <223>
is shown*

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/088,639

DATE: 08/06/2002

TIME: 14:10:46

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

```

58 Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Trp Asp Ser Ser Gly Thr His
59                85                90                95
61 ccg gta ttc ggc gga ggg acc cgg gtg acc gtc cta ggt caa gcc aac 336
62 Pro Val Phe Gly Gly Gly Thr Arg Val Thr Val Leu Gly Gln Ala Asn
63                100                105                110
65 ggt gaa ggc ggc tct ggt ggc ggg gga tcc gga ggc ggc ggt tct gag 384
66 Gly Glu Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
67                115                120                125
68 gtg cag ttg gtg gag tct ggg gga ggc ttg gta aag cct ggg ggg tcc 432
69 Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly Ser
70                130                135                140
72 ctg aga ctc tct tgt gta gcc tct ggg tcc atc ttc agt agc tct gtt 480
73 Leu Arg Leu Ser Cys Val Ala Ser Gly Ser Ile Phe Ser Ser Ser Val
74 145                150                155                160
76 atg cac tgg gtc cgc cag gct cca gga aag ggt ctg gag tgg gtc tca 528
77 Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser
78                165                170                175
80 gtt att agt gaa aat ggg cgt acc att aac tac gca gac tct gtg aag 576
81 Val Ile Ser Glu Asn Gly Arg Thr Ile Asn Tyr Ala Asp Ser Val Lys
82                180                185                190
84 ggc cga ttc acc atc tcc aga gac aac gcc aag aac tca ctg ttt ctg 624
85 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Phe Leu
86                195                200                205
88 cag atg aac agc ctg aca ggc gag gac acg gcc gtc tat tac tgt agt 672
89 Gln Met Asn Ser Leu Thr Gly Glu Asp Thr Ala Val Tyr Tyr Cys Ser
90                210                215                220
92 aga gag ggg gga cct gga aca acg tcc aac cgg ctc gat gcc tgg ggc 720
93 Arg Glu Gly Gly Pro Gly Thr Thr Ser Asn Arg Leu Asp Ala Trp Gly
94 225                230                235                240
96 ccg gga gtc ctg gtc acc gtt tcc tca 747
97 Pro Gly Val Leu Val Thr Val Ser Ser
98                245
101 <210> SEQ ID NO: 2
102 <211> LENGTH: 249
103 <212> TYPE: PRT
104 <213> ORGANISM: Macaca fascicularis
105 <223> OTHER INFORMATION: Coding sequence VL (1-109) - modified Huston
106 linker (110-127) - VH (128-249)

```

E--> 108 <400> SEQUENCE: 2

same error

```

109 Ser Ser Glu Leu Thr Gln Gly Pro Ala Leu Ser Val Ala Leu Gly His
110 1                5                10                15
112 Thr Val Arg Met Thr Cys Gln Gly Asp Ser Leu Lys Thr Tyr Tyr Ala
113                20                25                30
115 Ser Trp Tyr Gln Gln Lys Pro Gly Glu Val Pro Val Leu Val Ile Tyr
116                35                40                45
118 Gly Asn Asn Tyr Arg Pro Ser Gly Ile Pro Gly Arg Phe Ser Gly Ser
119                50                55                60
121 Trp Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Ala Ala Gln Val Glu
122 65                70                75                80

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/088,639

DATE: 08/06/2002

TIME: 14:10:46

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

```

124 Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Trp Asp Ser Ser Gly Thr His
125           85           90           95
127 Pro Val Phe Gly Gly Gly Thr Arg Val Thr Val Leu Gly Gln Ala Asn
128           100           105           110
129 Gly Glu Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu
130           115           120           125
132 Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys Pro Gly Gly Ser
133           130           135           140
135 Leu Arg Leu Ser Cys Val Ala Ser Gly Ser Ile Phe Ser Ser Ser Val
136 145           150           155           160
138 Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val Ser
139           165           170           175
141 Val Ile Ser Glu Asn Gly Arg Thr Ile Asn Tyr Ala Asp Ser Val Lys
142           180           185           190
144 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Phe Leu
145           195           200           205
147 Gln Met Asn Ser Leu Thr Gly Glu Asp Thr Ala Val Tyr Tyr Cys Ser
148           210           215           220
150 Arg Glu Gly Gly Pro Gly Thr Thr Ser Asn Arg Leu Asp Ala Trp Gly
151 225           230           235           240
153 Pro Gly Val Leu Val Thr Val Ser Ser
154           245
158 <210> SEQ ID NO: 3
159 <211> LENGTH: 1073
160 <212> TYPE: PRT
161 <213> ORGANISM: Human
163 <223> OTHER INFORMATION: TA6-Human integrin alpha-6A

```

E--> 165 <400> SEQUENCE: 3

```

166 Met Ala Ala Ala Gly Gln Leu Cys Leu Leu Tyr Leu Ser Ala Gly Leu
167 1           5           10           15
169 Leu Ser Arg Leu Gly Ala Ala Phe Asn Leu Asp Thr Arg Glu Asp Asn
170           20           25           30
172 Val Ile Arg Lys Tyr Gly Asp Pro Gly Ser Leu Phe Gly Phe Ser Leu
173           35           40           45
175 Ala Met His Trp Gln Leu Gln Pro Glu Asp Lys Arg Leu Leu Leu Val
176           50           55           60
178 Gly Ala Pro Arg Gly Glu Ala Leu Pro Leu Gln Arg Ala Asn Arg Thr
179 65           70           75           80
181 Gly Gly Leu Tyr Ser Cys Asp Ile Thr Ala Arg Gly Pro Cys Thr Arg
182           85           90           95
184 Ile Glu Phe Asp Asn Asp Ala Asp Pro Thr Ser Glu Ser Lys Glu Asp
185           100           105           110
187 Gln Trp Met Gly Val Thr Val Gln Ser Gln Gly Pro Gly Gly Lys Val
188           115           120           125
189 Val Thr Cys Ala His Arg Tyr Glu Lys Arg Gln His Val Asn Thr Lys
190           130           135           140
192 Gln Glu Ser Arg Asp Ile Phe Gly Arg Cys Tyr Val Leu Ser Gln Asn
193 145           150           155           160
195 Leu Arg Ile Glu Asp Asp Met Asp Gly Gly Asp Trp Ser Phe Cys Asp

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/088,639

DATE: 08/06/2002

TIME: 14:10:46

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

196				165				170				175				
198	Gly	Arg	Leu	Arg	Gly	His	Glu	Lys	Phe	Gly	Ser	Cys	Gln	Gln	Gly	Val
199				180					185				190			
201	Ala	Ala	Thr	Phe	Thr	Lys	Asp	Phe	His	Tyr	Ile	Val	Phe	Gly	Ala	Pro
202			195					200					205			
204	Gly	Thr	Tyr	Asn	Trp	Lys	Gly	Ile	Val	Arg	Val	Glu	Gln	Lys	Asn	Asn
205		210					215					220				
207	Thr	Phe	Phe	Asp	Met	Asn	Ile	Phe	Glu	Asp	Gly	Pro	Tyr	Glu	Val	Gly
208	225					230					235				240	
210	Gly	Glu	Thr	Glu	His	Asp	Glu	Ser	Leu	Val	Pro	Val	Pro	Ala	Asn	Ser
211					245					250					255	
213	Tyr	Leu	Gly	Phe	Ser	Leu	Asp	Ser	Gly	Lys	Gly	Ile	Val	Ser	Lys	Asp
214				260					265				270			
216	Glu	Ile	Thr	Phe	Val	Ser	Gly	Ala	Pro	Arg	Ala	Asn	His	Ser	Gly	Ala
217			275						280				285			
219	Val	Val	Leu	Leu	Lys	Arg	Asp	Met	Lys	Ser	Ala	His	Leu	Leu	Pro	Glu
220		290					295					300				
222	His	Ile	Phe	Asp	Gly	Glu	Gly	Leu	Ala	Ser	Ser	Phe	Gly	Tyr	Asp	Val
223	305					310					315				320	
225	Ala	Val	Val	Asp	Leu	Asn	Lys	Asp	Gly	Trp	Gln	Asp	Ile	Val	Ile	Gly
226				325						330					335	
228	Ala	Pro	Gln	Tyr	Phe	Asp	Arg	Asp	Gly	Glu	Val	Gly	Gly	Ala	Val	Tyr
229			340						345				350			
231	Val	Tyr	Met	Asn	Gln	Gln	Gly	Arg	Trp	Asn	Asn	Val	Lys	Pro	Ile	Arg
232			355					360					365			
234	Leu	Asn	Gly	Thr	Lys	Asp	Ser	Met	Phe	Gly	Ile	Ala	Val	Lys	Asn	Ile
235		370					375					380				
237	Gly	Asp	Ile	Asn	Gln	Asp	Gly	Tyr	Pro	Asp	Ile	Ala	Val	Gly	Ala	Pro
238	385					390					395				400	
240	Tyr	Asp	Asp	Leu	Gly	Lys	Val	Phe	Ile	Tyr	His	Gly	Ser	Ala	Asn	Gly
241				405						410				415		
243	Ile	Asn	Thr	Lys	Pro	Thr	Gln	Val	Leu	Lys	Gly	Ile	Ser	Pro	Tyr	Phe
244				420					425					430		
246	Gly	Tyr	Ser	Ile	Ala	Gly	Asn	Met	Asp	Leu	Asp	Arg	Asn	Ser	Tyr	Pro
247			435					440					445			
248	Asp	Val	Ala	Val	Gly	Ser	Leu	Ser	Asp	Ser	Val	Thr	Ile	Phe	Arg	Ser
249		450					455					460				
251	Arg	Pro	Val	Ile	Asn	Ile	Gln	Lys	Thr	Ile	Thr	Val	Thr	Pro	Asn	Arg
252	465					470					475				480	
254	Ile	Asp	Leu	Arg	Gln	Lys	Thr	Ala	Cys	Gly	Ala	Pro	Ser	Gly	Ile	Cys
255				485						490				495		
257	Leu	Gln	Val	Lys	Ser	Cys	Phe	Glu	Tyr	Thr	Ala	Asn	Pro	Ala	Gly	Tyr
258				500					505					510		
260	Asn	Pro	Ser	Ile	Ser	Ile	Val	Gly	Thr	Leu	Glu	Ala	Glu	Lys	Glu	Arg
261			515						520					525		
263	Arg	Lys	Ser	Gly	Leu	Ser	Ser	Arg	Val	Gln	Phe	Arg	Asn	Gln	Gly	Ser
264		530					535					540				
266	Glu	Pro	Lys	Tyr	Thr	Gln	Glu	Leu	Thr	Leu	Lys	Arg	Gln	Lys	Gln	Lys
267	545					550					555				560	

RAW SEQUENCE LISTING

DATE: 08/06/2002

PATENT APPLICATION: US/10/088,639

TIME: 14:10:46

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

```

269 Val Cys Met Glu Glu Thr Leu Trp Leu Gln Asp Asn Ile Arg Asp Lys
270                               565                               570                               575
272 Leu Arg Pro Ile Pro Ile Thr Ala Ser Val Glu Ile Gln Glu Pro Ser
273                               580                               585                               590
275 Ser Arg Arg Arg Val Asn Ser Leu Pro Glu Val Leu Pro Ile Leu Asn
276                               595                               600                               605
278 Ser Asp Glu Pro Lys Thr Ala His Ile Asp Val His Phe Leu Lys Glu
279                               610                               615                               620
281 Gly Cys Gly Asp Asp Asn Val Cys Asn Ser Asn Leu Lys Leu Glu Tyr
282 625                               630                               635                               640
284 Lys Phe Cys Thr Arg Glu Gly Asn Gln Asp Lys Phe Ser Tyr Leu Pro
285                               645                               650                               655
287 Ile Gln Lys Gly Val Pro Glu Leu Val Leu Lys Asp Gln Lys Asp Ile
288                               660                               665                               670
290 Ala Leu Glu Ile Thr Val Thr Asn Ser Pro Ser Asn Pro Arg Asn Pro
291                               675                               680                               685
293 Thr Lys Asp Gly Asp Asp Ala His Glu Ala Lys Leu Ile Ala Thr Phe
294                               690                               695                               700
296 Pro Asp Thr Leu Thr Tyr Ser Ala Tyr Arg Glu Leu Arg Ala Phe Pro
297 705                               710                               715                               720
299 Glu Lys Gln Leu Ser Cys Val Ala Asn Gln Asn Gly Ser Gln Ala Asp
300                               725                               730                               735
302 Cys Glu Leu Gly Asn Pro Phe Lys Arg Asn Ser Asn Val Thr Phe Tyr
303                               740                               745                               750
305 Leu Val Leu Ser Thr Thr Glu Val Thr Phe Asp Thr Pro Asp Leu Asp
306                               755                               760                               765
307 Ile Asn Leu Lys Leu Glu Thr Thr Ser Asn Gln Asp Asn Leu Ala Pro
308                               770                               775                               780
310 Ile Thr Ala Lys Ala Lys Val Val Ile Glu Leu Leu Leu Ser Val Ser
311 785                               790                               795                               800
313 Gly Val Ala Lys Pro Ser Gln Val Tyr Phe Gly Gly Thr Val Val Gly
314                               805                               810                               815
316 Glu Gln Ala Met Lys Ser Glu Asp Glu Val Gly Ser Leu Ile Glu Tyr
317                               820                               825                               830
319 Glu Phe Arg Val Ile Asn Leu Gly Lys Pro Leu Thr Asn Leu Gly Thr
320                               835                               840                               845
322 Ala Thr Leu Asn Ile Gln Trp Pro Lys Glu Ile Ser Asn Gly Lys Trp
323                               850                               855                               860
325 Leu Leu Tyr Leu Val Lys Val Glu Ser Lys Gly Leu Glu Lys Val Thr
326 865                               870                               875                               880
328 Cys Glu Pro Gln Lys Glu Ile Asn Ser Leu Asn Leu Thr Glu Ser His
329                               885                               890                               895
331 Asn Ser Arg Lys Lys Arg Glu Ile Thr Glu Lys Gln Ile Asp Asp Asn
332                               900                               905                               910
334 Arg Lys Phe Ser Leu Phe Ala Glu Arg Lys Tyr Gln Thr Leu Asn Cys
335                               915                               920                               925
337 Ser Val Asn Val Asn Cys Val Asn Ile Arg Cys Pro Leu Arg Gly Leu
338                               930                               935                               940
340 Asp Ser Lys Ala Ser Leu Ile Leu Arg Ser Arg Leu Trp Asn Ser Thr

```

RAW SEQUENCE LISTING

DATE: 08/06/2002

PATENT APPLICATION: US/10/088,639

TIME: 14:10:46

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

```

341 945          950          955          960
343 Phe Leu Glu Glu Tyr Ser Lys Leu Asn Tyr Leu Asp Ile Leu Met Arg
344          965          970          975
346 Ala Phe Ile Asp Val Thr Ala Ala Ala Glu Asn Ile Arg Leu Pro Asn
347          980          985          990
349 Ala Gly Thr Gln Val Arg Val Thr Val Phe Pro Ser Lys Thr Val Ala
350          995          1000          1005
352 Gln Tyr Ser Gly Val Pro Trp Trp Ile Ile Leu Val Ala Ile Leu Ala
353 1010          1015          1020
355 Gly Ile Leu Met Leu Ala Leu Leu Val Phe Ile Leu Trp Lys Cys Gly
356 1025          1030          1035          1040
358 Phe Phe Lys Arg Asn Lys Lys Asp His Tyr Asp Ala Thr Tyr His Lys
359          1045          1050          1055
361 Ala Glu Ile His Ala Gln Pro Ser Asp Lys Glu Arg Leu Thr Ser Asp
362          1060          1065          1070

```

364 Ala

366 <210> SEQ ID NO: 4

367 <211> LENGTH: 1875

368 <212> TYPE: PRT

369 <213> ORGANISM: Human

371 <223> OTHER INFORMATION: Integrin beta-4 precursor

E--> 373 <400> SEQUENCE: 4

```

374 Met Ala Gly Pro Arg Pro Ser Pro Trp Ala Arg Leu Leu Leu Ala Ala
375 1          5          10          15
377 Leu Ile Ser Val Ser Leu Ser Gly Thr Leu Ala Asn Arg Cys Lys Lys
378          20          25          30
380 Ala Pro Val Lys Ser Cys Thr Glu Cys Val Arg Val Asp Lys Asp Cys
381          35          40          45
383 Ala Tyr Cys Thr Asp Glu Met Phe Arg Asp Arg Arg Cys Asn Thr Gln
384          50          55          60
386 Ala Glu Leu Leu Ala Ala Gly Cys Gln Arg Glu Ser Ile Val Val Met
387 65          70          75          80
389 Glu Ser Ser Phe Gln Ile Thr Glu Glu Thr Gln Ile Asp Thr Thr Leu
390          85          90          95
392 Arg Arg Ser Gln Met Ser Pro Gln Gly Leu Arg Val Arg Leu Arg Pro
393          100          105          110
395 Gly Glu Glu Arg His Phe Glu Leu Glu Val Phe Glu Pro Leu Glu Ser
396          115          120          125
398 Pro Val Asp Leu Tyr Ile Leu Met Asp Phe Ser Asn Ser Met Ser Asp
399          130          135          140
401 Asp Leu Asp Asn Leu Lys Lys Met Gly Gln Asn Leu Ala Arg Val Leu
402 145          150          155          160
404 Ser Gln Leu Thr Ser Asp Tyr Thr Ile Gly Phe Gly Lys Phe Val Asp
405          165          170          175
407 Lys Val Ser Val Pro Gln Thr Asp Met Arg Pro Glu Lys Leu Lys Glu
408          180          185          190
410 Pro Trp Pro Asn Ser Asp Pro Pro Phe Ser Phe Lys Asn Val Ile Ser
411          195          200          205
413 Leu Thr Glu Asp Val Asp Glu Phe Arg Asn Lys Leu Gln Gly Glu Arg

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/088,639

DATE: 08/06/2002

TIME: 14:10:46

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

```

414      210      215      220
416 Ile Ser Gly Asn Leu Asp Ala Pro Glu Gly Gly Phe Asp Ala Ile Leu
417 225      230      235      240
419 Gln Thr Ala Val Cys Thr Arg Asp Ile Gly Trp Arg Pro Asp Ser Thr
420      245      250      255
422 His Leu Leu Val Phe Ser Thr Glu Ser Ala Phe His Tyr Glu Ala Asp
423      260      265      270
425 Gly Ala Asn Val Leu Ala Gly Ile Met Ser Arg Asn Asp Glu Arg Cys
426      275      280      285
427 His Leu Asp Thr Thr Gly Thr Tyr Thr Gln Tyr Arg Thr Gln Asp Tyr
428      290      295      300
430 Pro Ser Val Pro Thr Leu Val Arg Leu Leu Ala Lys His Asn Ile Ile
431 305      310      315      320
433 Pro Ile Phe Ala Val Thr Asn Tyr Ser Tyr Ser Tyr Tyr Glu Lys Leu
434      325      330      335
436 His Thr Tyr Phe Pro Val Ser Ser Leu Gly Val Leu Gln Glu Asp Ser
437      340      345      350
439 Ser Asn Ile Val Glu Leu Leu Glu Glu Ala Phe Asn Arg Ile Arg Ser
440      355      360      365
442 Asn Leu Asp Ile Arg Ala Leu Asp Ser Pro Arg Gly Leu Arg Thr Glu
443      370      375      380
445 Val Thr Ser Lys Met Phe Gln Lys Thr Arg Thr Gly Ser Phe His Ile
446 385      390      395      400
448 Arg Arg Gly Glu Val Gly Ile Tyr Gln Val Gln Leu Arg Ala Leu Glu
449      405      410      415
451 His Val Asp Gly Thr His Val Cys Gln Leu Pro Glu Asp Gln Lys Gly
452      420      425      430
454 Asn Ile His Leu Lys Pro Ser Phe Ser Asp Gly Leu Lys Met Asp Ala
455      435      440      445
457 Gly Ile Ile Cys Asp Val Cys Thr Cys Glu Leu Gln Lys Glu Val Arg
458      450      455      460
460 Ser Ala Arg Cys Ser Phe Asn Gly Asp Phe Val Cys Gly Gln Cys Val
461 465      470      475      480
463 Cys Ser Glu Gly Trp Ser Gly Gln Thr Cys Asn Cys Ser Thr Gly Ser
464      485      490      495
466 Leu Ser Asp Ile Gln Pro Cys Leu Arg Glu Gly Glu Asp Lys Pro Cys
467      500      505      510
469 Ser Gly Arg Gly Glu Cys Gln Cys Gly His Cys Val Cys Tyr Gly Glu
470      515      520      525
472 Gly Arg Tyr Glu Gly Gln Phe Cys Glu Tyr Asp Asn Phe Gln Cys Pro
473      530      535      540
475 Arg Thr Ser Gly Phe Leu Cys Asn Asp Arg Gly Arg Cys Ser Met Gly
476 545      550      555      560
478 Gln Cys Val Cys Glu Pro Gly Trp Thr Gly Pro Ser Cys Asp Cys Pro
479      565      570      575
481 Leu Ser Asn Ala Thr Cys Ile Asp Ser Asn Gly Gly Ile Cys Asn Gly
482      580      585      590
484 Arg Gly His Cys Glu Cys Gly Arg Cys His Cys His Gln Gln Ser Leu
485      595      600      605

```


RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/088,639

DATE: 08/06/2002

TIME: 14:10:46

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

```

486 Tyr Thr Asp Thr Ile Cys Glu Ile Asn Tyr Ser Ala Ile His Pro Gly
487      610                      615                      620
489 Leu Cys Glu Asp Leu Arg Ser Cys Val Gln Cys Gln Ala Trp Gly Thr
490 625                      630                      635                      640
492 Gly Glu Lys Lys Gly Arg Thr Cys Glu Glu Cys Asn Phe Lys Val Lys
493                      645                      650                      655
495 Met Val Asp Glu Leu Lys Arg Ala Glu Glu Val Val Val Arg Cys Ser
496                      660                      665                      670
498 Phe Arg Asp Glu Asp Asp Asp Cys Thr Tyr Ser Tyr Thr Met Glu Gly
499                      675                      680                      685
501 Asp Gly Ala Pro Gly Pro Asn Ser Thr Val Leu Val His Lys Lys Lys
502                      690                      695                      700
504 Asp Cys Pro Pro Gly Ser Phe Trp Trp Leu Ile Pro Leu Leu Leu Leu
505 705                      710                      715                      720
507 Leu Leu Pro Leu Leu Ala Leu Leu Leu Leu Leu Cys Trp Lys Tyr Cys
508                      725                      730                      735
510 Ala Cys Cys Lys Ala Cys Leu Ala Leu Leu Pro Cys Cys Asn Arg Gly
511                      740                      745                      750
513 His Met Val Gly Phe Lys Glu Asp His Tyr Met Leu Arg Glu Asn Leu
514                      755                      760                      765
516 Met Ala Ser Asp His Leu Asp Thr Pro Met Leu Arg Ser Gly Asn Leu
517                      770                      775                      780
519 Lys Gly Arg Asp Val Val Arg Trp Lys Val Thr Asn Asn Met Gln Arg
520 785                      790                      795                      800
522 Pro Gly Phe Ala Thr His Ala Ala Ser Ile Asn Pro Thr Glu Leu Val
523                      805                      810                      815
525 Pro Tyr Gly Leu Ser Leu Arg Leu Ala Arg Leu Cys Thr Glu Asn Leu
526                      820                      825                      830
528 Leu Lys Pro Asp Thr Arg Glu Cys Ala Gln Leu Arg Gln Glu Val Glu
529                      835                      840                      845
531 Glu Asn Leu Asn Glu Val Tyr Arg Gln Ile Ser Gly Val His Lys Leu
532                      850                      855                      860
534 Gln Gln Thr Lys Phe Arg Gln Gln Pro Asn Ala Gly Lys Lys Gln Asp
535 865                      870                      875                      880
537 His Thr Ile Val Asp Thr Val Leu Met Ala Pro Arg Ser Ala Lys Pro
538                      885                      890                      895
540 Ala Leu Leu Lys Leu Thr Glu Lys Gln Val Glu Gln Arg Ala Phe His
541                      900                      905                      910
543 Asp Leu Lys Val Ala Pro Gly Tyr Tyr Thr Leu Thr Ala Asp Gln Asp
544                      915                      920                      925
545 Ala Arg Gly Met Val Glu Phe Gln Glu Gly Val Glu Leu Val Asp Val
546                      930                      935                      940
548 Arg Val Pro Leu Phe Ile Arg Pro Glu Asp Asp Asp Glu Lys Gln Leu
549 945                      950                      955                      960
551 Leu Val Glu Ala Ile Asp Val Pro Ala Gly Thr Ala Thr Leu Gly Arg
552                      965                      970                      975
554 Arg Leu Val Asn Ile Thr Ile Ile Lys Glu Gln Ala Arg Asp Val Val
555                      980                      985                      990
557 Ser Phe Glu Gln Pro Glu Phe Ser Val Ser Arg Gly Asp Gln Val Ala

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/088,639

DATE: 08/06/2002

TIME: 14:10:46

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

```

558          995          1000          1005
560 Arg Ile Pro Val Ile Arg Arg Val Leu Asp Gly Gly Lys Ser Gln Val
561      1010          1015          1020
563 Ser Tyr Arg Thr Gln Asp Gly Thr Ala Gln Gly Asn Arg Asp Tyr Ile
564 1025          1030          1035          1040
566 Pro Val Glu Gly Glu Leu Leu Phe Gln Pro Gly Glu Ala Trp Lys Glu
567          1045          1050          1055
569 Leu Gln Val Lys Leu Leu Glu Leu Gln Glu Val Asp Ser Leu Leu Arg
570          1060          1065          1070
572 Gly Arg Gln Val Arg Arg Phe His Val Gln Leu Ser Asn Pro Lys Phe
573      1075          1080          1085
575 Gly Ala His Leu Gly Gln Pro His Ser Thr Thr Ile Ile Ile Arg Asp
576      1090          1095          1100
578 Pro Asp Glu Leu Asp Arg Ser Phe Thr Ser Gln Met Leu Ser Ser Gln
579 1105          1110          1115          1120
581 Pro Pro Pro His Gly Asp Leu Gly Ala Pro Gln Asn Pro Asn Ala Lys
582          1125          1130          1135
584 Ala Ala Gly Ser Arg Lys Ile His Phe Asn Trp Leu Pro Pro Ser Gly
585          1140          1145          1150
587 Lys Pro Met Gly Tyr Arg Val Lys Tyr Trp Ile Gln Gly Asp Ser Glu
588      1155          1160          1165
590 Ser Glu Ala His Leu Leu Asp Ser Lys Val Pro Ser Val Glu Leu Thr
591      1170          1175          1180
593 Asn Leu Tyr Pro Tyr Cys Asp Tyr Glu Met Lys Val Cys Ala Tyr Gly
594 1185          1190          1195          1200
596 Ala Gln Gly Glu Gly Pro Tyr Ser Ser Leu Val Ser Cys Arg Thr His
597          1205          1210          1215
599 Gln Glu Val Pro Ser Glu Pro Gly Arg Leu Ala Phe Asn Val Val Ser
600          1220          1225          1230
602 Ser Thr Val Thr Gln Leu Ser Trp Ala Glu Pro Ala Glu Thr Asn Gly
603          1235          1240          1245
604 Glu Ile Thr Ala Tyr Glu Val Cys Tyr Gly Leu Val Asn Asp Asp Asn
605      1250          1255          1260
607 Arg Pro Ile Gly Pro Met Lys Lys Val Leu Val Asp Asn Pro Lys Asn
608 1265          1270          1275          1280
610 Arg Met Leu Leu Ile Glu Asn Leu Arg Glu Ser Gln Pro Tyr Arg Tyr
611          1285          1290          1295
613 Thr Val Lys Ala Arg Asn Gly Ala Gly Trp Gly Pro Glu Arg Glu Ala
614          1300          1305          1310
616 Ile Ile Asn Leu Ala Thr Gln Pro Lys Arg Pro Met Ser Ile Pro Ile
617      1315          1320          1325
619 Ile Pro Asp Ile Pro Ile Val Asp Ala Gln Ser Gly Glu Asp Tyr Asp
620      1330          1335          1340
622 Ser Phe Leu Met Tyr Ser Asp Asp Val Leu Arg Ser Pro Ser Gly Ser
623 1345          1350          1355          1360
625 Gln Arg Pro Ser Val Ser Asp Asp Thr Gly Cys Gly Trp Lys Phe Glu
626          1365          1370          1375
628 Pro Leu Leu Gly Glu Glu Leu Asp Leu Arg Arg Val Thr Trp Arg Leu
629          1380          1385          1390

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/088,639

DATE: 08/06/2002

TIME: 14:10:46

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

```

631 Pro Pro Glu Leu Ile Pro Arg Leu Ser Ala Ser Ser Gly Arg Ser Ser
632      1395      1400      1405
634 Asp Ala Glu Ala Pro Thr Ala Pro Arg Thr Thr Ala Ala Arg Ala Gly
635      1410      1415      1420
637 Arg Ala Ala Ala Val Pro Arg Ser Ala Thr Pro Gly Pro Pro Gly Glu
638 1425      1430      1435      1440
640 His Leu Val Asn Gly Arg Met Asp Phe Ala Phe Pro Gly Ser Thr Asn
641      1445      1450      1455
643 Ser Leu His Arg Met Thr Thr Thr Ser Ala Ala Ala Tyr Gly Thr His
644      1460      1465      1470
646 Leu Ser Pro His Val Pro His Arg Val Leu Ser Thr Ser Ser Thr Leu
647      1475      1480      1485
649 Thr Arg Asp Tyr Asn Ser Leu Thr Arg Ser Glu His Ser His Ser Thr
650      1490      1495      1500
652 Thr Leu Pro Arg Asp Tyr Ser Thr Leu Thr Ser Val Ser Ser His Gly
653 1505      1510      1515      1520
655 Leu Pro Pro Ile Trp Glu His Gly Arg Ser Arg Leu Pro Leu Ser Trp
656      1525      1530      1535
658 Ala Leu Gly Ser Arg Ser Arg Ala Gln Met Lys Gly Phe Pro Pro Ser
659      1540      1545      1550
661 Arg Gly Pro Arg Asp Ser Ile Ile Leu Ala Gly Arg Pro Ala Ala Pro
662      1555      1560      1565
663 Ser Trp Gly Pro Asp Ser Arg Leu Thr Ala Gly Val Pro Asp Thr Pro
664      1570      1575      1580
666 Thr Arg Leu Val Phe Ser Ala Leu Gly Pro Thr Ser Leu Arg Val Ser
667 1585      1590      1595      1600
669 Trp Gln Glu Pro Arg Cys Glu Arg Pro Leu Gln Gly Tyr Ser Val Glu
670      1605      1610      1615
672 Tyr Gln Leu Leu Asn Gly Gly Glu Leu His Arg Leu Asn Ile Pro Asn
673      1620      1625      1630
675 Pro Ala Gln Thr Ser Val Val Val Glu Asp Leu Leu Pro Asn His Ser
676      1635      1640      1645
678 Tyr Val Phe Arg Val Arg Ala Gln Ser Gln Glu Gly Trp Gly Arg Glu
679      1650      1655      1660
681 Arg Glu Gly Val Ile Thr Ile Glu Ser Gln Val His Pro Gln Ser Pro
682 1665      1670      1675      1680
684 Leu Cys Pro Leu Pro Gly Ser Ala Phe Thr Leu Ser Thr Pro Ser Ala
685      1685      1690      1695
687 Pro Gly Pro Leu Val Phe Thr Ala Leu Ser Pro Asp Ser Leu Gln Leu
688      1700      1705      1710
690 Ser Trp Glu Arg Pro Arg Arg Pro Asn Gly Asp Ile Val Gly Tyr Leu
691      1715      1720      1725
693 Val Thr Cys Glu Met Ala Gln Gly Gly Gly Pro Ala Thr Ala Phe Arg
694      1730      1735      1740
696 Val Asp Gly Asp Ser Pro Glu Ser Arg Leu Thr Val Pro Gly Leu Ser
697 1745      1750      1755      1760
699 Glu Asn Val Pro Tyr Lys Phe Lys Val Gln Ala Arg Thr Thr Glu Gly
700      1765      1770      1775
702 Phe Gly Pro Glu Arg Glu Gly Ile Ile Thr Ile Glu Ser Gln Asp Gly

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/088,639

DATE: 08/06/2002

TIME: 14:10:46

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

```

703          1780          1785          1790
705 Gly Pro Phe Pro Gln Leu Gly Ser Arg Ala Gly Leu Phe Gln His Pro
706          1795          1800          1805
708 Leu Gln Ser Glu Tyr Ser Ser Ile Thr Thr Thr His Thr Ser Ala Thr
709          1810          1815          1820
711 Glu Pro Phe Leu Val Asp Gly Pro Thr Leu Gly Ala Gln His Leu Glu
712 1825          1830          1835          1840
714 Ala Gly Gly Ser Leu Thr Arg His Val Thr Gln Glu Phe Val Ser Arg
715          1845          1850          1855
717 Thr Leu Thr Thr Ser Gly Thr Leu Ser Thr His Met Asp Gln Gln Phe
718          1860          1865          1870
720 Phe Gln Thr
721          1875
722 <210> SEQ ID NO: 5
723 <211> LENGTH: 8
724 <212> TYPE: PRT
725 <213> ORGANISM: Human same
727 <223> OTHER INFORMATION: Amino acids 61-68 of SEQ ID NO: 3
E--> 729 <400> SEQUENCE: 5
730 Leu Leu Leu Val Gly Ala Pro Arg
731 1 5
734 <210> SEQ ID NO: 6
735 <211> LENGTH: 20
736 <212> TYPE: PRT
737 <213> ORGANISM: Human same
739 <223> OTHER INFORMATION: Amino acids 77-96 of SEQ ID NO: 3
E--> 741 <400> SEQUENCE: 6
742 Ala Asn Arg Thr Gly Gly Leu Tyr Ser Cys Asp Ile Thr Ala Arg Gly
743 1 5 10 15
745 Pro Cys Thr Arg
746 20
749 <210> SEQ ID NO: 7
750 <211> LENGTH: 10
751 <212> TYPE: PRT
752 <213> ORGANISM: Human same
754 <223> OTHER INFORMATION: Amino acids 127-137 of SEQ ID NO: 3
E--> 756 <400> SEQUENCE: 7
757 Val Val Thr Cys Ala His Arg Tyr Glu Lys
758 1 5 10
761 <210> SEQ ID NO: 8
762 <211> LENGTH: 7
763 <212> TYPE: PRT
764 <213> ORGANISM: Human same
766 <223> OTHER INFORMATION: Amino acids 138-144 of SEQ ID NO: 3
E--> 768 <400> SEQUENCE: 8
769 Arg Gln His Val Asn Thr Lys
770 1 5
773 <210> SEQ ID NO: 9
774 <211> LENGTH: 9

```

RAW SEQUENCE LISTING

DATE: 08/06/2002

PATENT APPLICATION: US/10/088,639

TIME: 14:10:46

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

775 <212> TYPE: PRT
 776 <213> ORGANISM: Human *same*
 778 <223> OTHER INFORMATION: Amino acids 154-162 of SEQ ID NO: 3
E--> 780 <400> SEQUENCE: 9
 781 Cys Tyr Val Leu Ser Gln Asn Leu Arg
 782 1 5
 783 <210> SEQ ID NO: 10
 784 <211> LENGTH: 14
 785 <212> TYPE: PRT
 786 <213> ORGANISM: Human *same*
 788 <223> OTHER INFORMATION: Amino acids 185-198 of SEQ ID NO: 3
E--> 790 <400> SEQUENCE: 10
 791 Phe Gly Ser Cys Gln Gln Gly Val Ala Ala Thr Phe Thr Lys
 792 1 5 10
 795 <210> SEQ ID NO: 11
 796 <211> LENGTH: 16
 797 <212> TYPE: PRT
 798 <213> ORGANISM: Human *same*
 800 <223> OTHER INFORMATION: Amino acids 198-214 of SEQ ID NO: 3
E--> 802 <400> SEQUENCE: 11
 803 Asp Phe His Tyr Ile Val Phe Gly Ala Pro Gly Thr Tyr Asn Trp Lys
 804 1 5 10 15
 807 <210> SEQ ID NO: 12
 808 <211> LENGTH: 11
 809 <212> TYPE: PRT
 810 <213> ORGANISM: Human *same*
 812 <223> OTHER INFORMATION: Amino acids 272-282 of SEQ ID NO: 3
E--> 814 <400> SEQUENCE: 12
 815 Asp Glu Ile Thr Phe Val Ser Gly Ala Pro Arg
 816 1 5 10
 819 <210> SEQ ID NO: 13
 820 <211> LENGTH: 11
 821 <212> TYPE: PRT
 822 <213> ORGANISM: Human *same*
 824 <223> OTHER INFORMATION: Amino acids 283-293 of SEQ ID NO: 3
E--> 826 <400> SEQUENCE: 13
 827 Ala Asn His Ser Gly Ala Val Val Leu Leu Lys
 828 1 5 10
 831 <210> SEQ ID NO: 14
 832 <211> LENGTH: 16
 833 <212> TYPE: PRT
 834 <213> ORGANISM: Human *same*
 836 <223> OTHER INFORMATION: Amino acids 328-343 of SEQ ID NO: 3
E--> 838 <400> SEQUENCE: 14
 839 Asp Gly Trp Gln Asp Ile Val Ile Gly Ala Pro Gln Tyr Phe Asp Arg
 840 1 5 10 15
 841 <210> SEQ ID NO: 15
 842 <211> LENGTH: 17
 843 <212> TYPE: PRT

RAW SEQUENCE LISTING

DATE: 08/06/2002

PATENT APPLICATION: US/10/088,639

TIME: 14:10:46

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

844 <213> ORGANISM: Human *same*
846 <223> OTHER INFORMATION: Amino acids 344-360 of SEQ ID NO: 3
E--> 848 <400> SEQUENCE: 15
849 Asp Gly Glu Val Gly Gly Ala Val Tyr Val Tyr Met Asn Gln Gln Gly
850 1 5 10 15
852 Arg
856 <210> SEQ ID NO: 16
857 <211> LENGTH: 8
858 <212> TYPE: PRT
859 <213> ORGANISM: Human *same*
861 <223> OTHER INFORMATION: Amino acids 361-368 of SEQ ID NO: 3
E--> 863 <400> SEQUENCE: 16
864 Trp Asn Asn Val Lys Pro Ile Arg
865 1 5
868 <210> SEQ ID NO: 17
869 <211> LENGTH: 24
870 <212> TYPE: PRT
871 <213> ORGANISM: Human *same*
873 <223> OTHER INFORMATION: Amino acids 383-406 of SEQ ID NO: 3
E--> 875 <400> SEQUENCE: 17
876 Asn Ile Gly Asp Ile Asn Gln Asp Gly Tyr Pro Asp Ile Ala Val Gly
877 1 5 10 15
879 Ala Pro Tyr Asp Asp Leu Gly Lys
880 20
883 <210> SEQ ID NO: 18
884 <211> LENGTH: 18
885 <212> TYPE: PRT
886 <213> ORGANISM: Human *same*
888 <223> OTHER INFORMATION: Amino acids 427-444 of SEQ ID NO: 3
E--> 890 <400> SEQUENCE: 18
891 Gly Ile Ser Pro Tyr Phe Gly Tyr Ser Ile Ala Gly Asn Met Asp Leu
892 1 5 10 15
894 Asp Arg
896 <210> SEQ ID NO: 19
897 <211> LENGTH: 19
898 <212> TYPE: PRT
899 <213> ORGANISM: Human *same*
901 <223> OTHER INFORMATION: Amino acids 445-463 of SEQ ID NO: 3
E--> 903 <400> SEQUENCE: 19
904 Asn Ser Tyr Pro Asp Val Ala Val Gly Ser Leu Ser Asp Ser Val Thr
905 1 5 10 15
907 Ile Phe Arg
911 <210> SEQ ID NO: 20
912 <211> LENGTH: 9
913 <212> TYPE: PRT
914 <213> ORGANISM: Human *same*
916 <223> OTHER INFORMATION: Amino acids 464-472 of SEQ ID NO: 3
E--> 918 <400> SEQUENCE: 20
919 Ser Arg Pro Val Ile Asn Ile Gln Lys

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/088,639

DATE: 08/06/2002

TIME: 14:10:46

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

920 1 5
1137 <210> SEQ ID NO: 39
1138 <211> LENGTH: 18
1139 <212> TYPE: PRT
1140 <213> ORGANISM: Human
1142 <223> /OTHER INFORMATION: Amino acids 414-431 of SEQ ID NO: 4
E--> 1144 <400> SEQUENCE: 39Ala Leu Glu His Val Asp Gly Thr His Val Cys Gln Leu Pro Glu
1145 Asp
E--> 1146 1 5 10 15
E--> 1148 Gln Lys

The types of errors shown exist throughout
the Sequence Listing. Please check subsequent
sequences for similar errors.

same
*insert
a hard
return*

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/088,639

DATE: 08/06/2002

TIME: 14:10:47

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

L:36 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:1
L:108 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:2
L:165 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:3
L:373 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:4
L:729 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:5
L:741 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:6
L:756 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:7
L:768 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:8
L:780 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:9
L:790 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:10
L:802 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:11
L:814 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:12
L:826 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:13
L:838 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:14
L:848 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:15
L:863 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:16
L:875 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:17
L:890 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:18
L:903 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:19
L:918 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:20
L:930 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:21
L:945 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:22
L:958 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:23
L:970 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:24
L:982 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:25
L:994 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:26
L:1006 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:27
L:1016 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:28
L:1028 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:29
L:1040 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:30
L:1052 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:31
L:1064 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:32
L:1074 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:33
L:1086 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:34
L:1098 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:35
L:1110 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:36
L:1122 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:37
L:1132 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:38
L:1144 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:39
L:1146 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:39
L:1148 M:252 E: No. of Seq. differs, <211> LENGTH:Input:18 Found:3 SEQ:39
L:1159 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:40
L:1171 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:41
L:1183 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:42
L:1193 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:43
L:1205 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:44
L:1220 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:45
L:1232 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:46

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/088,639

DATE: 08/06/2002

TIME: 14:10:47

Input Set : A:\003300-920.ST25.txt

Output Set: N:\CRF3\08062002\J088639.raw

L:1244 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:47
L:1256 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:48
L:1268 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:49
L:1280 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:50